

**FORM PTO-1449 TO BE FILED WITH
INFORMATION DISCLOSURE STATEMENT**

U.S. Department of Commerce
Patent and Trademark Office

SUPPLEMENTAL INFORMATION
DISCLOSURE STATEMENT
BY APPLICANT

: Atty. Docket No.: OSU1159-141K
: Serial No.: 10/754,127
: Filing Date: January 9, 2004
: Applicant: McCreery
: Group Art Unit: 2822
: Examiner: Amir Zarabian

U.S. PATENT DOCUMENT

Examiner's Initial	Document Number	Date	Name(s)	Class/Sub-class
<i>ZR</i>	6,114,099	9/2000	Liu et al.	430/324

FOREIGN PATENT DOCUMENT

Examiner's Initial	Document Number	Date	Name(s)	Translation
<i>ZR</i>	WO 92/13983 A1	8/1992	Pinson et al.	Yes (Abstract)

Examiner <i>[Signature]</i>	Date Considered <i>8/22/05</i>
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Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

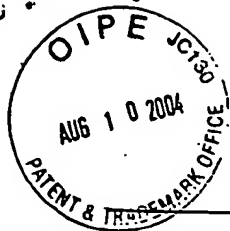
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Trisha M. Beachy
Trisha M. Beachy, Paralegal



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: Atty. Docket No.: OSU1159-141K
: Serial No.: 10/754,127
: Filing Date: January 9, 2004
: Applicant: Richard L. McCreery
: Group Art Unit: 2811
: Examiner: Not Known

U.S. PATENT DOCUMENTS

Examiner's Initial	Document Number	Date	Name	Class/Sub-class
<i>ML</i>	6,046,925	4/4/2000	Tsien et al.	365/1111
<i>ML</i>	6,124,963	9/26/2000	Schumaker	359/245

Examiner <i>ML</i>	Date Considered <i>8/22/05</i>
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	<i>Trisha M. Beachy</i> Trisha M. Beachy, Paralegal



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U.S. Department of Commerce : Atty. Docket No.: OSU1159-141K
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SUPPLEMENTAL INFORMATION : Applicant: Richard L. McCreery
DISCLOSURE STATEMENT : Group Art Unit: 2811
BY APPLICANTS : Examiner: Not Known

U.S. PATENT DOCUMENTS

Examiner's Initial	Document Number	Date	Name	Class/Sub- class
<i>W</i>	5,208,154	5/4/1993	Weaver et al.	435/176

Examiner <i>W</i>	Date Considered <i>8/22/04</i>
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Trisha M. Beachy
Trisha M. Beachy, Paralegal

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U.S. Department of Commerce
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Atty. Docket No. OSU1159-141K Serial No. Not Yet Rec'd

INFORMATION
DISCLOSURE STATEMENT
BY APPLICANTS

Richard L. McCreery

Applicant

January 9, 2004

Filing Date

Group Art Unit

Examiner's name

U.S. PATENT DOCUMENTS

Examiner's Initial	Document Number	Date	Name	Class/Sub-class
<u>MM</u>	6,103,868	08/15/2000	Heath et al.	528/482
<u>↓</u>	6,128,214	10/03/2000	Kuekes et al.	365/151
<u>↓</u>	4,828,917	05/09/1989	Wegner et al.	428/333
<u>↓</u>	5,846,909	12/08/1998	McDevitt et al.	505/233
<u>↓</u>	5,908,692	06/01/1999	Hamers et al.	428/333

FOREIGN PATENT DOCUMENTS

Examiner's Initial	Document Number	Date	Country/Name	Translation? yes/no
<u>MM</u>	<u>NONE</u>			

OTHER DOCUMENTS

1. MM C.A. Mirkin, M.A. Ratner, "*Molecular Electronics*", Annu. Rev. Phys. Chem., 1992, 43, 719 - 754.
2. MM M.A. Reed, J.M. Tour, "*Computing with Molecules*", Scientific American, 2000, 86-93
3. MM L.A. Bumm, J.J. Arnold, M.T. Cygan, T.D. Dunbar, T.P. Burgin, L. Jones, D.L. Allara, J.M. Tour, P.S. Weiss, "*Are single Molecular Wires Conducting?*", Science, 1996, 271, 1705
4. MM C. Zhou, M.R. Deshpande, M.A. Reed, L. Jones, J.M. Tour, "*Nanoscale Metal/Self-Assembled Monolayer/Metal Heterostructures*", Appl. Phys. Lett., 1997, 71(5), 661.

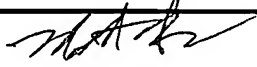
5. M.A. Reed, C. Zhou, C.J. Muller, T.P. Burgin, J.M. Tour, "Conductance of a Molecular Junction", *Science*, 1997, **278**, 252.
6. L.A. Bumm, J.J. Arnold, T.D. Dunbar, D.L. Allara, P.S. Weiss, "Electron Transfer through Organic Molecules", *J. Phys. Chem. B.*, 1999, **103**, 8122-8127.
7. C.P. Collier, E.W. Wong, M. Belohradsky, F.M. Raymo, J.F. Stoddart, P.J. Kuekes, R.S. Williams, J.R. Heath, "Electronically Configurable Molecular-Based Logic Gates", *Science*, 1999, **285**, 391 -393
8. C.P. Collier, G. Mattersteig, E.W. Wong, Y. Luo, K. Beverly, J. Sampaio, F.M. Raymo, J.F. Stoddart, J.R. Heath, "A [2]Catenane-Based Solid State Electronically Reconfigurable Switch", *Science*, 2000, **289**, 1172 - 1175.
9. J. Pinson, J. Saveant, R. Hitmi, "Process for Modifying the Surface of Carbon-Containing Materials by Electro-Chemical Reduction of Diazonium Salts, Applicable in Particular to Carbon Fibers For Composite Materials: Carbon-Containing Materials So Modified", French Patent, PCT/FR92/0087, 1992.
10. P. Allongue, M. Delamar, B. Desbat, O. Fagebaume, R. Hitmi, J. Pinson, J.M. Saveant, "Covalent Modification of Carbon Surfaces by Aryl Radicals Generated from the Electrochemical Reduction of Diazonium Salts", *J. Am. Chem. Soc.*, 1997, **119**, 201-207
11. Y-C. Liu, R.L. McCreery, "Reactions of Organic Monolayers on Carbon Surfaces Observed with Unenhanced Raman Spectroscopy", *J. Am. Chem. Soc.*, 1995, **117**, 11254.
12. S. Ranganathan, R. McCreery, S.M. Majji, M. Madou, "Photoresist-Derived Carbon for Microelectrochemical Applications", *J. Electrochem. Soc.*, **2000**, *147*, 277 - 282.
13. S.N. Yaliraki, M. Kemp, M.A. Ratner, "Conductance of Molecular Wires: Influence of Molecule-Electrode Binding", *J. Am. Chem. Soc.*, 1999, **121**, 3428-3434.
14. T. Rueckes, K. Kim, E. Joselevich, G.Y. Tseng, C. Cheung, C.M. Lieber, "Carbon Nanotube-based Nonvolatile Random Access Memory of Molecular Computing", *Science*, 2000, **289**, 94-97.
15. J. Chen, M.A. Reed, A.M. Rawlett, J.M. Tour, "Large On-Off Ratios and Negative Differential Resistance in a Molecular Electronic Device", *Science*, 1999, **286**, 1551-1552.
16. C. Kergueris, J.P. Bourgoin, S. Palacin, D. Esteve, C. Urbina, M. Magoga, C. Joachim, "Electron Transport Through a Metal-Molecule-Metal Junction", *Phys. Review B*, 1999,

59(19), 12505.

17. W. Tian, S. Datta, S. Hong, R. Reifengerger, J.I. Henderson, C.P. Kubiak, "Conductance Spectra of Molecular Wires", J. Chem. Physics, 1998, **109**(7), 2874-2882.
18. D.F. Padowitz, R.J. Hamers, "Voltage-Dependent STM of Covalently Bound Molecules on Si(100)", J. Phys. Chem., 1998, **102**, 8541-8545.
19. S. Datta, W. Tian, S. Hong, R. Reifengerger, J.I. Henderson, C.P. Kubiak, "Current-Voltage Characteristics of Self-Assembled Monolayers by Scanning Tunneling Microscopy", Phys. Rev. Let., 1997, **79**(13), 2530-2533.
20. C.H. de Villeneuve, J. Pinson, M.C. Bernard, P. Allongue, "Electrochemical Formation of Close-packed Phenyl layers on Si (111)", J. Phys. Chem. B., 1997, **101**, 2415-2420.
21. Y-C Liu, R.L. McCreery, "Raman Spectroscopic Determination of the Structure and Orientation of Organic Monolayers Chemisorbed on Carbon Electrode Surfaces", Anal. Chem., 1997, **69**, 2091.
22. C. Joachim, J.K. Gimzewski, R.R. Schlittler, C. Chavy, "Electronic Transparence of a Single C₆₀ Molecule", Phys. Rev. Let., **74**(11), 2102-2105.
23. P. Allongue, M. Delamar, B. Desbat, O. Fagebaume, R. Hitmi, J. Pinson, J.M. Saveant, "Covalent Modification of Carbon Surfaces by Aryl Radicals Generated from the Electrochemical Reduction of Diazonium Salts", J. Am. Chem. Soc., 1997, **119**, 201-207.
24. C. P. Andrieux, F. Gonzales, J.M. Saveant, "Derivatization of Carbon Surfaces by Anodic Oxidation of Arylacetates, Electrochemical Manipulation of the Grafted Films", J. Am. Chem. Soc., 1997, **119**, 4292-4300.
25. Peihong Chen, R.L. McCreery, "Control of Electron Transfer Kinetics at Glassy Carbon Electrodes by Specific Surface Modifiaction", Anal. Chem., 1996, **68**, 3958.
26. M.T. Cygan, T.D. Dunbar, J.J. Arnold, L.A. Bumm, N.F. Shedlock, T.P. Burgin, L. Jones, D.L. Allara, J.M. Tour, P.S. Weiss, "Insertion, Conductivity, and Structures of Conjugated Organic Oligomers in Self-Assembled Alkanethiol Monolayers of Au(111)", J. Am. Chem. Soc., 1998, **120**, 2721-2732.
27. Y. Xia, N. Ventateswaran, D. Qin, J. Tein, G.M. Whitesides, "Use of Electroless Silver as the Substrate in Microcontact Printing of Alkanethiols and Its Application in Microfarication", Langmuir, 1998, **14**, 363-371.
28. D.G. Walter, D.J. Campbell, C.A. Mirkin, "Photon-Gated Electron Transfer in Two-

Component Self-Assembled Monolayers", J. Phys. Chem. B., 1999, **103**, 402-405

29. G.S. McCarty, P.S. Weiss, "Scanning Probe Studies of Single Nanostructures", Chem. Rev., 1999, **99**, 1983-1990.
30. Y. Xia, J.A. Rogers, K.E. Paul, G.M. Whitesides, "Unconventional Methods for Fabricating and Patterning Nanostructures", Chem. Rev., 1999, **99**, 1823-1848.
31. D.H. Gracias, J. Tien, T.L. Breen, C. Hsu, G.M. Whitesides, "Forming-Electrical Networks in Three Dimensions by Self-Assembly", Science, 2000, **289**, 1170-1172.
32. D.I. Gittens, D. Bethell, R.J. Nichols, D.J. Schiffrin, "Diode-Like Electron Transfer Across Nanostructured Films Containing a Redox Ligand", J. Mater. Chem., 2000, **10**, 79-83.
33. M.P. Schwartz, M.D. Ellison, S.K. Coulter, J.S. Hovis, R.J. Hamers, "Interaction of π -Bonded Semiconductor Surfaces: Structure, Selectivity, and Mechanistic Implications", J. Am. Chem. Soc., Web Edition 2000.
34. R.J. Hamers, S.K. Coulter, M.D. Ellison, J.S. Hovis, D.F. Padowitz, M.P. Schwartz, C.M. Greene, J.N. Russell, "Cycloaddition Chemistry of Organic Molecules with Semiconductor Surfaces", Acc. Chem. Res., 2000.
35. J.S. Hovis, S.K. Coulter, R.J. Hamers, M.P. D'Evelyn, J.N. Russell, J.E. Butler, "Cycloaddition Chemistry at Surfaces: Reaction of Alkenes with the Diamond (001)-2 x 1 Surface", J. Am. Chem. Soc., 2000, **122**, 732-733.
36. J.J. Storhoff, A.A. Lazarides, R.C. Mucic, C.A. Mirkin, R.L. Letsinger, G.C. Schatz, "What Controls the Optical Properties of DNA-Linked Gold Nanoparticle Assemblies?", 2000, **122**, 4640-4650.
37. M.D. Musick, C.D. Keating, L.A. Lyon, S.L. Botsko, D.J. Pena, W.D. Holliway, T.M. McEvoy, J.N. Richardson, M.J. Natan, "Metal Films Prepared by Stepwise Assembly. 2 Construction and Characterization of Colloidal Au and Ag Multilayers", Chem. Mater., WEB 2000.

Examiner 	Date Considered <i>2/22/05</i>
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